



express



steidle's update

Following the announcement of the Vision nearly a year ago, the President's Commission on the Implementation of U.S. Space Exploration Policy stated that "international talents and technologies will be of significant value in successfully implementing the space exploration vision," further recommending that NASA pursue international partnerships as we move forward.

NASA and Exploration Systems began to build upon existing relationships and form new global bonds in pursuit of the Vision. As a result, this year has given me the opportunity to meet with representatives from various international space agencies to update our partners about our current activities as well as engage them in our Vision and future activities. Based upon my discussions with many of our international colleagues, it is clear that the sentiment of the Vision is shared throughout the world.

As we pursue this bold exploration objective and work to advance technological progress, we will strive to utilize our partner countries' existing skills and capabilities. In order to begin this process, last month's International Space Exploration Workshop, co-sponsored by the Exploration Systems Mission Directorate and the Office of External Affairs, brought together representatives from space agencies around the world in a dialogue highlighting global plans for space exploration and the potential to share assets among countries.

Our most recent Human and Robotic Broad Agency Announcement, a release that allows U.S. funding of foreign proposals, is an example of the innovative ways in which Exploration Systems is beginning to engage global talent.

As we take tangible steps toward the global goal of exploration, it is my hope that the continuous engagement of worldwide skills, knowledge, and experience will serve as a constant source of both inspiration and innovation. Please join me in welcoming our international partners in our journey to the moon, Mars, and beyond.

Leader-Led Workshops Promote Team Environment



Steidle addresses the employees of Marshall Space Flight Center during their October Leader-Led Workshop, the first of the newly combined One NASA/ESMD workshops.

Associate Administrator for the Exploration Systems Mission Directorate Craig Steidle is helping to make sure the goal of a unified NASA is achieved by participating in the One NASA Leader-Led Workshop initiative this fall, a program begun to promote better information about NASA objectives and policies for all employees and the contractor community.

Originally conceived as site visits from center directors and senior NASA management, ESMD and One NASA partnered to combine the existing workshops and the Exploration Systems Center Tour for a more complete and effective program. Steidle and ESMD are featured at each visit through a 50-minute overview presentation of the directorate, including highlights of any center-specific personnel serving ESMD details at headquarters, employees and contractors involved in exploration efforts at the center itself, and ways in which the center has played a role in the

Exploration Systems mission thus far. Steidle is joined at the workshops by each respective center director and several associate administrators.

Many of the Leader-Led Workshops were held from mid-October through December, and the tour will be completed in January with visits to Dryden Flight Research Center and NASA Headquarters. You can read more about the workshops and the One NASA initiative at http://onenasa.nasa.gov/NEWS/Second_Leader_Led_.htm. ■

ESMD Selects Innovative Proposals

On November 16, Exploration Systems announced the selection of 70 proposals submitted in response to the Exploration Systems Research and Technology Broad Agency Announcement (BAA). Released in support of the research and technology goals and objectives of the Vision for Space Exploration, the work associated with these proposals is valued at more than \$1 billion through fiscal year 2009. "The efforts of the past three months by hundreds across NASA and beyond and culminating in this BAA selection will transform the technological foundations for future space exploration," said John C. Mankins, manager of the Exploration Systems Research and Technology

Program. "Not only as a result of the novel concepts and new technology, but even more by the management transformation it represents."

In order to develop new partnerships with industry and academia as well as promote innovative ways of doing business, BAAs are being used as an alternative method of working toward new technologies and research. Over 3700 Notices of Intent (NOI) were submitted in response to the BAA and were evaluated and subjected to a cross-project integrated review. This helps the ESMD evaluation team ensure that each NOI receives the same rigorous review process and timely and objective evaluation.

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Monthly Highlights

In taking the next steps toward enhancing international exploration cooperation, NASA hosted the invitation-only **International Workshop on Creating New and Sustainable Space Exploration** on November 16-18, at the Mayflower Hotel in Washington.

Attendees from space agencies around the world were welcomed by Administrator Sean O'Keefe, who made opening remarks, while Associate Administrator for the Exploration Systems Mission Directorate Craig E. Steidle and conference co-host Assistant Administrator of the Office of External Relations Michael O'Brien presented an overview of NASA's initiatives toward implementing the Vision for Space Exploration as well as ideas for collaboration among international agencies. Joining O'Keefe, Steidle and O'Brien in representing NASA were Associate Administrator of the Space Operations Mission Directorate William F. Readdy and Deputy Associate Administrator for the Science Mission Directorate Orlando Figueroa. The event was moderated by Bobby Watkins, ESMD chief of staff.

Attended by 18 international agencies, the conference provided a means for NASA's partners worldwide to present their own plans and aspirations. This forum



helped participants take the first step toward establishing a coordinated road map for space exploration and discuss and identify the areas in which international collaboration holds promise.

The workshop featured parallel sessions in Human Exploration Objectives, Strategy, and Architecture Robotic Exploration; Objectives to Support Human Missions Human Missions and Systems—Beyond LEO; Exploration Systems Research and Technology; Development Approaches for International Collaboration.

To view the agenda and the individual presentations given each day, visit <http://www.aiaa.org/events/SpaceExp/>.

The **ESMD Systems Engineering and Integration (SE&I)** team recently visited five of the world's leaders in systems engineering processes in the ongoing effort to improve processes and encourage innovation in the organization. The meetings focused on benchmarking each of the organizations' systems engineering processes and studying the internal structure of each of the companies. "These meetings have helped our team gain insight into how we can synthesize our own systems engineering and integration organization, structure, and processes, while allowing us to educate our hosts on the scope of the Vision and the objectives of Exploration Systems," said Craig Cornelius, team co-lead and Development Programs Division Operations Officer. This ongoing exchange of information is hoped to enhance partnership between ESMD and non-aerospace organizations. The organizations visited by the SE&I team included The Procter and Gamble Company, Bechtel National, Inc., the U.S. Navy's Virginia Class Submarine program, Chevron Texaco, and Nextel. ■



As this first year in our effort to implement the Vision for Space Exploration draws to a close, I would like to take the opportunity to thank each of you for your efforts and leave you with some thoughts for the new year:

- We Have a Great Team – Greater Than the Sum of Its Parts
- We Are Assembling World Class Programs and Processes
- We Are Substantially Changing the Way NASA Does Business
- We Are Infusing Management Rigor, Consistency of Purpose, and Disciplined Processes
- Great Enthusiasm from US and International Industry to Participate
- We Have the Privilege to Be Working on Programs of High National Importance on Behalf of All Americans
- We Are Inspiring Our Children, the Next Generation of Americans, to Pick Up the Baton of Exploration
- United Support of Vision Will Ensure Sustainability

Innovative Proposals

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ation of their relevance, technical quality, cost, resources, planning, and socioeconomic qualities.

Following evaluation of the NOIs, nearly 500 submitters – including 1000 links to centers and 600 ties to academia – were asked to prepare and present full proposals, each of which followed an evaluation process similar to that of the NOIs. The resulting final list of 70 was drawn from the 485 proposals submitted and covers areas such as Advanced Space Technology, Technology Maturation, and Innovative Partnerships and created significant collaboration across the centers. To view the titles of the winning proposals, visit http://exploration.nasa.gov/acquisition/hrtbaa_092004_awards.pdf. ■



Another Milestone Met!

On September 1, Revision A of the Crew Exploration Vehicle (CEV) Level 1 Requirements were delivered to Associate Administrator Craig Steidle by the requirements division, meeting the milestone set by Steidle (see photo above). This was the first in a series of revisions necessary for completion and baselining prior to the release of the CEV Request for Proposals (RFP) in spring of 2005. Incorporating six

packages including Concept of Operations, Robotic Requirements, System of Systems, and CEV Spirals 1, 2, and 3, the requirements were completed in only seven months and were the result of collaboration between representatives from Headquarters, Requirements Formulation Team, Astronaut Office, and the ESMD Operations Advisory Group. 🍀

tidbits

We may be a few months past the Brickyard 400, but NASCAR is only going to get hotter over the next few months as the drivers blaze by in pursuit of the Nextel Cup.



Did you know ...

Materials from the Space Shuttle thermal protection system are used on NASCAR racing cars to protect drivers from the extreme heat generated by the engines. Hey, you can't spell NASCAR without NASA!

events

December 2

One NASA Stennis Space Center Leader-Led Workshop
Houston

December 6

One NASA Jet Propulsion Laboratory Leader-Led Workshop
Pasadena, Calif.

December 7

One NASA Ames Research Center Leader-Led Workshop
Moffett Field, Calif.

December 10

One NASA Glenn Research Center Leader-Led Workshop
Cleveland

December 15

One NASA Johnson Space Center Leader-Led Workshop
Houston

December 16

One NASA Kennedy Space Center Leader-Led Workshop
Cape Canaveral, Fla.

January 6

One NASA Dryden Flight Research Center Leader-Led Workshop
Edwards, Calif.

January 10-13

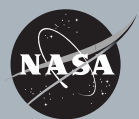
Aerospace Sciences Meeting and Exhibit
Reno, Nev.

January 30-February 1

1st Space Exploration Conference: Continuing the Voyage of Discovery
Orlando, Fla.

February 3-6

11th Annual Space Exploration Educators Conference
Houston



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